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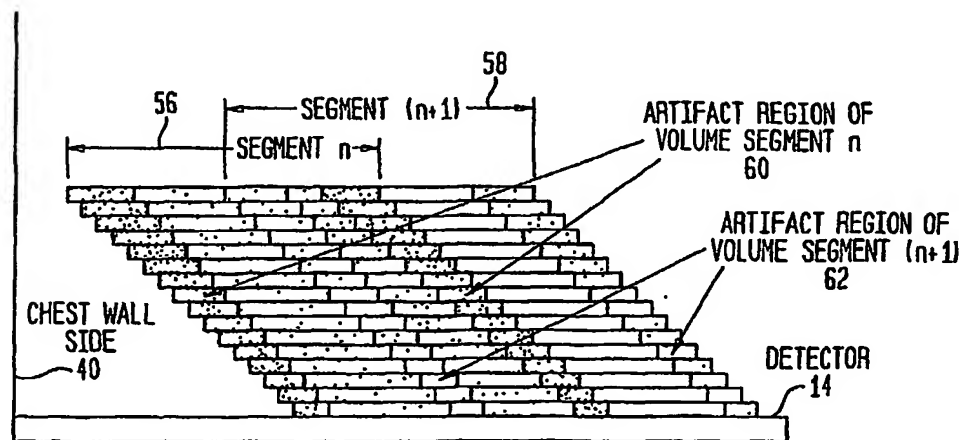
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(54) Title: **MULTI-SEGMENT CONE-BEAM RECONSTRUCTION SYSTEM AND METHOD FOR TOMOSYNTHESIS IMAGING**



(57) Abstract: A tomosynthesis method for creating a three-dimensional reconstruction of a target element volume (52) acquires radiation absorbance images of the target element (52) volume through a limited plurality of positions. The target element volume is divided into a plurality of volume segments (56, 58) and a reconstruction algorithm is applied to each segment (56, 58) to generate a three-dimensional reconstruction of each volume segment. The three-dimensional reconstruction of each volume segment (56, 58) is then merged to create a three-dimensional reconstruction of the target volume. A tomosynthesis system and a computer program product for carrying out tomosynthesis are also provided.

WO 2005/055803 A3



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